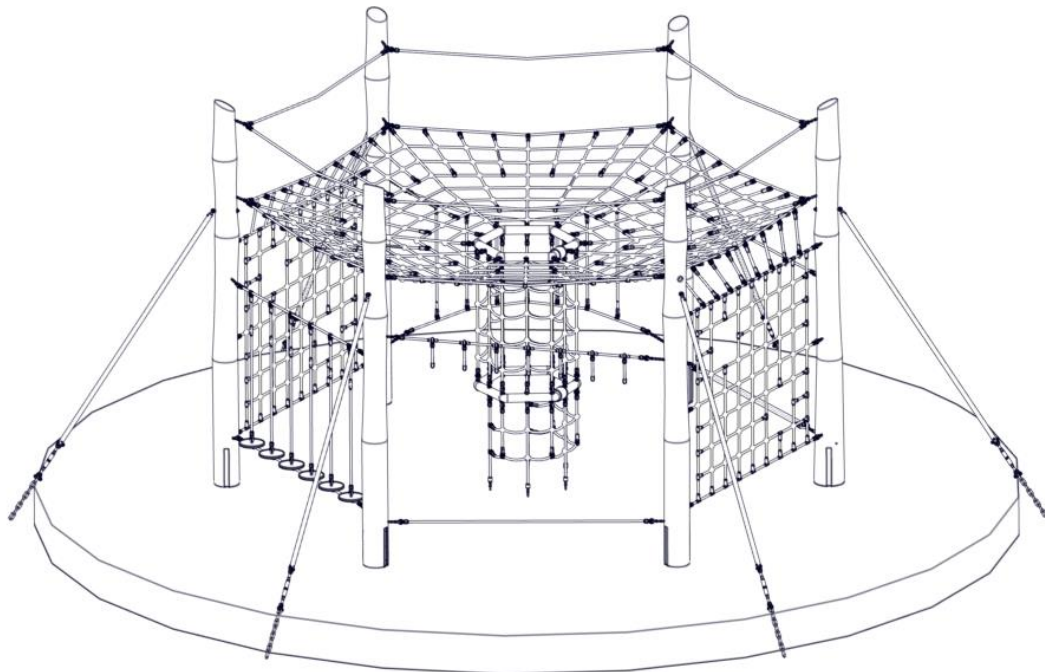


## **A Assembly instruction Hexagonal tower item no. 4631-50 for setting in concrete**

**Attention! Only use the assembly instructions included in the scope of delivery for the assembly, installation and maintenance of the respective equipment!**



Operator: \_\_\_\_\_

Location: \_\_\_\_\_

Revision 0 – 2023-05-31

Erste freigegebene Version

Montageanleitung

Revision 02 -2024-11-22

Stückliste auf neuen Satnd gebracht FH

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---

# 1 Introduction Assembling

## 1.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN1176-7 guidelines.

**Before installation work commences, please check that you have all of the equipment and fixation components in the parts list provided (see Tables 3-1 and 3-2).**

**Please consider that the installation has to be carried out only on even terrain (max. Slope up to 3%).**

Any spare parts that may be required can be obtained directly from your supplier.

Please do not hesitate to call your supplier if you have any problems during installation or in case of any other questions.



Following installation, complete assembly instructions, maintenance instructions and a maintenance record must be sent to the operator who must confirm receipt in writing. See the last page of this document.



All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray or another similar lubricant.

---

**We hereby confirm that this play equipment has been tested and certified in accordance with the play equipment standard EN 1176.**

## **Drawings / Views**

All optical drawings are showing only the measurements/dimensions and are no mandatory technical views of the complete item.

We reserve the right to change technical details of our articles which are serving for the further development of our articles and are reasonable for the customer.

## **Measurement tolerances**

Because of the properties and characteristics of the components, minor measurement tolerances compared to the indication on the sketches are possible. This concerns all shown measurements except the foundation measurements resp. measurements below upper edge ground level/play area.

## 2 Datasheet Hexagonal tower item no. 4631-50

1. Minimum space: Ø 10.83 m  
 Equipment room: Ø 9.83 m  
 Equipment height: Ø 9.83 m  
 Fall height: 3.00 m  
 Fall protection area: 75.9 m<sup>2</sup>
2. Required safety surface:

Surface material	Description mm	Minimum thickness of layer mm	Maximum height of fall mm
Topsoil grass			<= 1000*
Chipped bark	20 – 80 grain size	300	<= 2000
		400	<= 3000
Wood chippings	5 – 30 grain size	300	<= 2000
		400	<= 3000
Sand	0.2 – 2 grain size	300	<= 2000
		400	<= 3000
Gravel	2 – 8 grain size	300	<= 2000
		400	<= 3000
Other ground materials	As recommended by manufacturer		

3. Name and overall dimension of the largest component:  
 Steel post ø200-300 mm; length 5.00 m
4. Name and weight of the heaviest component:  
 Steel post (1 pallett), approx. 106 kg
5. Intended age group: 6 years and over

**Please note that this equipment is set in concrete.**

Concrete: B25 – C20/25

Required concrete: approx. ~20 m<sup>3</sup>

Foundations/area to be excavated:

**Top edge of concrete 40 cm below ground level**

**6** x 4.00 m x 1.00 m x 0.80 m (height),  
 total depth 1.10 m including 10 cm drainage

**1** x 1.10 m x 1.10 m x 0.25 m (height),  
 total depth 0.75 m including 10 cm drainage



**Round off foundation edges (min.R = 100 mm)! Sizes of foundations are “4-5” (natural ground).**

**Soil class 4: soft to medium plasticity, interleave bound, with minor portion of stone (portion < 30% with bigger diameter of 63 mm grain size).**

**Soil class 5: ground with soil class 3 and 4 with big portion of stones (portion > 30% with bigger diameter of 63 mm grain size).**

**In case of sandy and soft soils, the surface measure of foundations have to be enlarged for about 50%!**

6. Assembly time, once foundations complete: approx. 3 hours.  
Required assistance: 3 people.
7. Any spare parts which may be required can be obtained directly from your supplier
8. **We hereby confirm that this item of play equipment has been tested and certified in accordance with the play equipment standard EN 1176.**



### 3 Delivery contents (parts list with part numbers)

#### 3.1 In words



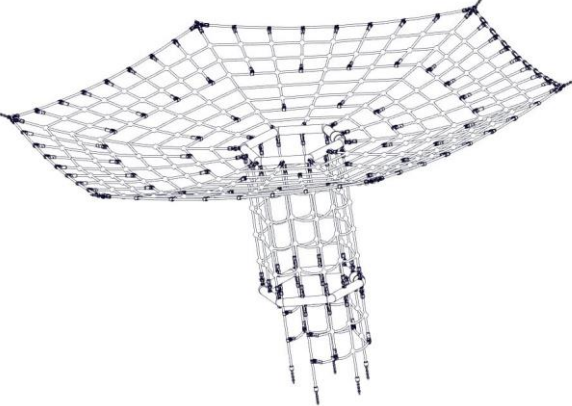


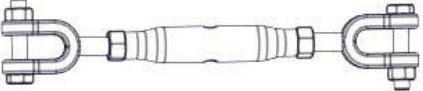
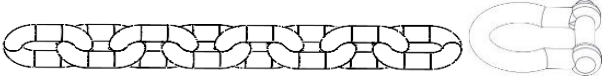
Table 3-1: Delivery contents, in words



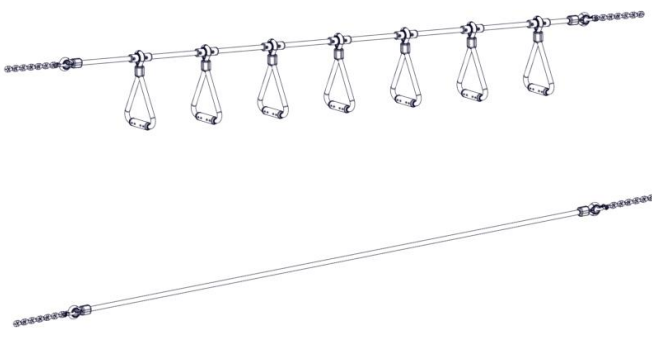
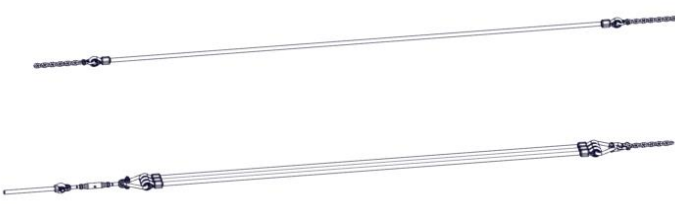
Pos.	Quantity	Element / Description	Size	O.K.	Missing
<b>1</b>	6	Robinia posts with steel lug	Ø 200-300, 5,00 m		
<b>1a</b>	1	Handrail / Ø 16 mm Hercules			
<b>2</b>	1	Horizontal net with chimney			
<b>2a</b>	1 (5 m)	Hercules ropes must be cut to size. (12 pieces)	with adhesive tape		
<b>3</b>	6	Bracing chain 7er			
<b>4</b>	6	Turnbuckle	M16		
<b>5</b>	6	Chain with shackle and peg	10er		
<b>6</b>	1	Vario element 9			
	1	Vario element 20			
	1	Vario element 17			
	1	Slackline with handrail			
	2	Climbing net 250 mesh			
<b>100</b>	100	Torx screws	5,5 x 25 mm		
<b>101</b>	6	Pegs plastic black			
<b>102</b>	6	Large washer			
<b>103</b>	6	Stop nut	M16		
<b>104</b>	6	Black cover cap	für M16		
<b>105</b>	6	Threaded rod	M16 x 320 mm		
<b>106</b>	6	VA bearing adapter	M16		
<b>107</b>	40	Slotted disc	Ø 60 mm, 3 mm		
<b>108</b>	40	Hole disc	Ø 60 mm, 3 mm		
<b>109</b>	5	Fixed anchor	M12		
<b>110</b>	5	Chain adapter	M12		
<b>111</b>	12	Lamellar plug for turnbuckle			
<b>112</b>	160	Pan head screws	5,5 x 19 mm		
<b>113</b>	40	Pan head screws	5,5 x 42 mm		
<b>114</b>	24	aufgeschittene T-Gelenke			
<b>BWE</b>	36	Reinforcing bars ribbed 6 pieces per foundation / on site /from customer	Ø 12mm, 2,9 m lg		

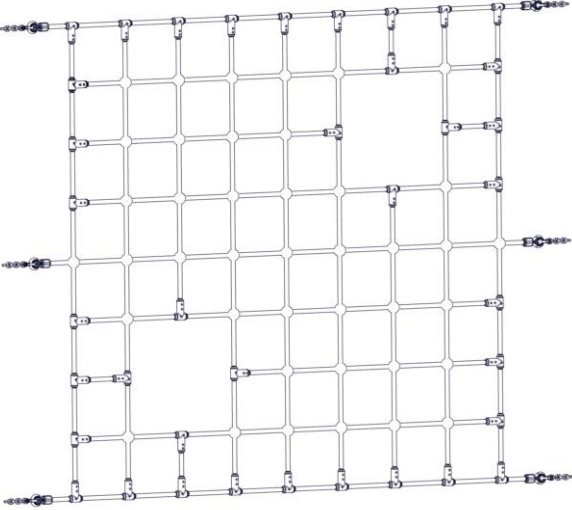






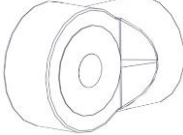
Pos.	Quantity	Element / Description	Size	O.K.	Missing
<b>BWE 1</b>	192	Reinforcing bars ribbed 32 pieces per foundation/ on site/ from customer	Ø 12 mm, 0,75 m		
<b>KNR</b>	6	Empty conduit Ø 500 mm, 650 mm long On site / from customer			




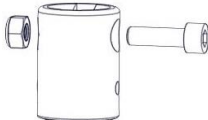

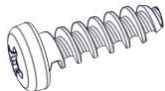

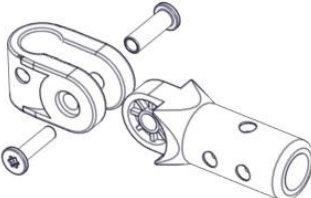

### 3.2 In symbols


Table 3-2: Delivery contents, in symbols

Pos.	Quantity	Symbol
1	6	 <p>Robinia posts with steel lug, Ø 200-300, 5,00 m</p>
1a	1	 <p>Handrail / Ø 16 mm Hercules</p>
2	1	 <p>Horizontal net with chimney</p>
2a	1 (5m)	 <p>Hercules ropes must be cut to size. (12 pieces) with adhesive tape</p>
3	6	 <p>Bracing chain 7er</p>
4	6	 <p>Turnbuckle</p>
5	6	 <p>Chain with shackle and peg</p>

Pos.	Quantity	Symbol
6	1	 <p>Vario element 9</p>
	1	 <p>Vario element 20</p>
	1	 <p>Vario element 17</p>
	1	 <p>Slackline with handrail</p>

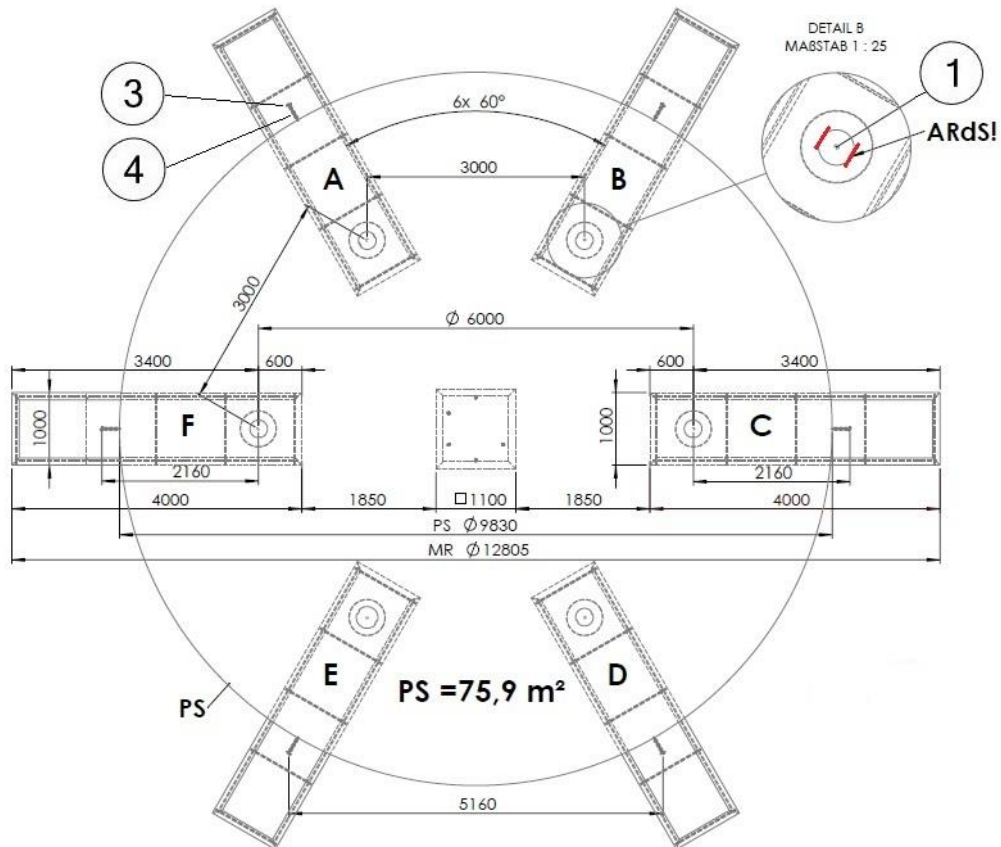
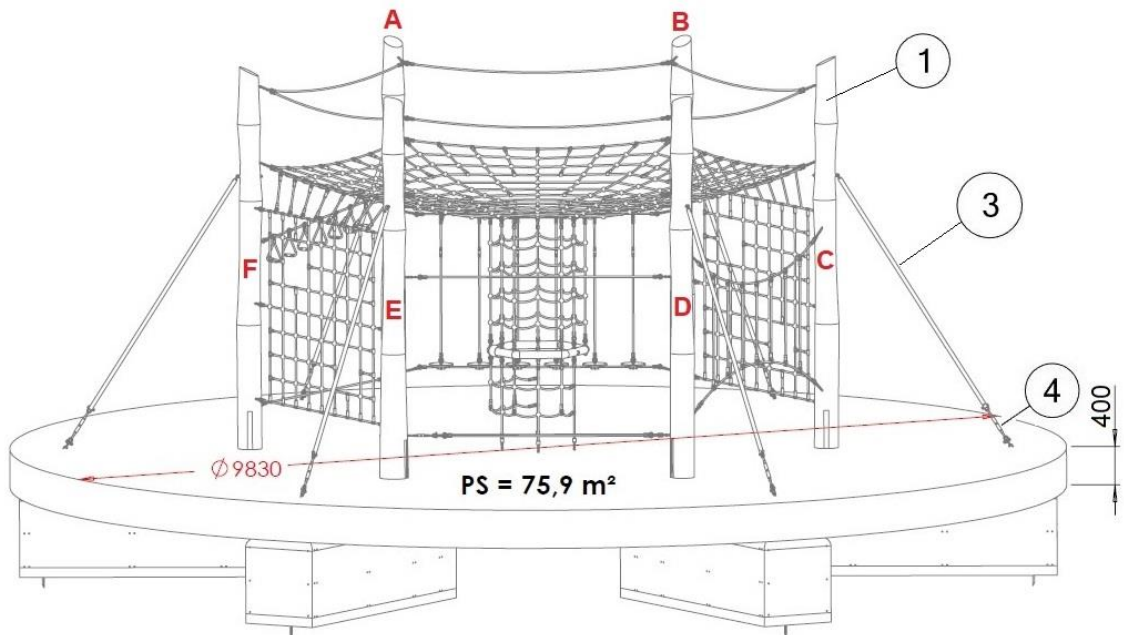
Pos.	Quantity	Symbol
	2	 <p data-bbox="794 931 1102 965">Climbing net 250 mesh</p>
100	100	 <p data-bbox="866 1043 1031 1077">Torx screws</p>
101	6	 <p data-bbox="831 1200 1066 1234">Pegs plastic black</p>
102	6	 <p data-bbox="791 1357 1106 1391">Large washer for M16</p>
103	6	 <p data-bbox="855 1491 1046 1525">Stop nut M16</p>
104	6	 <p data-bbox="791 1637 1106 1671">Black cover cap for M16</p>
105	6	 <p data-bbox="759 1715 1137 1749">Threaded rod M16 x 320 mm</p>
106	6	 <p data-bbox="823 1928 1078 1962">VA bearing adapter</p>

Pos.	Quantity	Symbol
107	40	 <p>Slotted disc, Ø 60 mm, 3 mm</p>
108	40	 <p>Hole disc, Ø 60mm, 3 mm</p>
109	5	 <p>Fixed anchor M12</p>
110	5	 <p>Chain adapter M12</p>
111	12	 <p>Lamellar plug for turnbuckle</p>
112	160	 <p>Pan head screws 5,5 x 19 mm</p>
113	40	 <p>Pan head screws 5,5 x 42 mm</p>
114	24	 <p>aufgeschnittene T-Gelenke</p>
KNR	6	 <p>Empty conduit Ø 500 mm, 650 mm long On site / from customer</p>

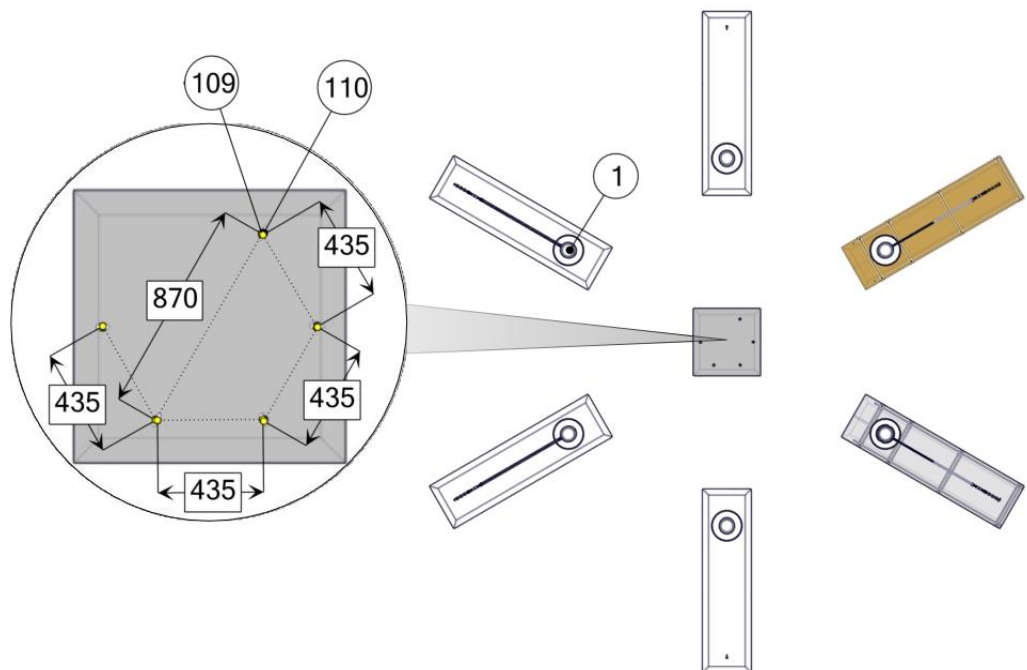
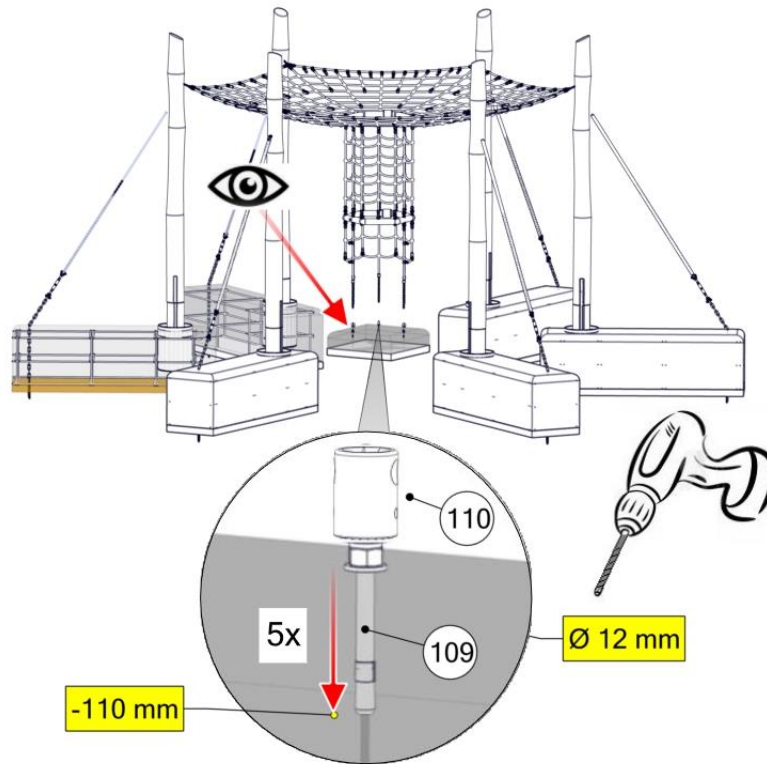
	<b>Version: Hexagonal tower item no. 4631-50</b>
<b>AB</b>	The legally permissible setting times must be observed!
<b>AE</b>	Anchor chains are fastened to the floor with plastic pegs.
<b>ARdS!</b>	Alignment of the steel straps on the robinia post (important!)
<b>BWE</b>	Reinforcing bars ribbed Ø 12 mm (on site)
<b>a.Einb.</b>	Chain set in concrete in the foundation
<b>D</b>	Concrete C25/30 (for foundations) Concrete requirement: ~20 m <sup>3</sup>
<b>ek</b>	Chains may need to be shortened during assembly.
<b>EWÖ</b>	Water drainage
<b>F</b>	Fall protection
<b>G</b>	Seepage layer
<b>KNR</b>	Empty conduit (e.g. concrete or PVC conduit) Ø 500 mm, 0.65 m long on site (to be provided by the customer)
<b>LRSA</b>	Fill the gap (between the empty conduit and steel mast) with fill with liquid concrete!
<b>LR</b>	Note the direction of the steel straps (important)
<b>MR</b>	Space required for the foundations
<b>M.Lot!</b>	Set up posts vertically!
<b>O.K.</b>	Upper edge of the play level
<b>O.K.F</b>	Top edge of the concrete
<b>PS</b>	Safety area
<b>ÜKV</b>	Screw turnbuckles crosswise!
<b>Wbu.</b>	After tensioning the turnbuckles and before filling the drop guard, close the holes in the threaded sleeve with plugs on site!!!
	<b>Round off foundation edges (min.R = 100 mm)! Sizes of foundations are designed for soils class "4-5" (natural ground). Soil class 4: soft to medium plasticity, interleave bound, with minor portion of stone (portion &lt; 30% with bigger diameter of 63 mm grain size). Soil class 5 : ground with soil class 3 and 4 with big portion of stones (portion &gt; 30% with bigger diameter of 63 mm grain size). In case of sandy and soft soils, the surface measure of foundations have to be enlarged for about 50% !</b>

See drawing!

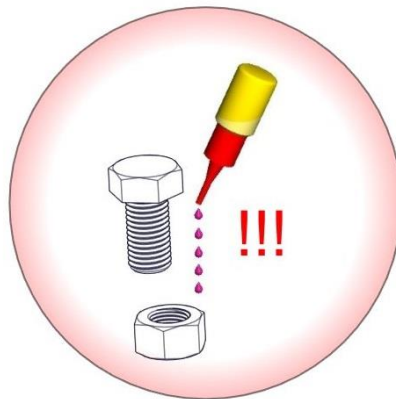
## 4 Erection instructions







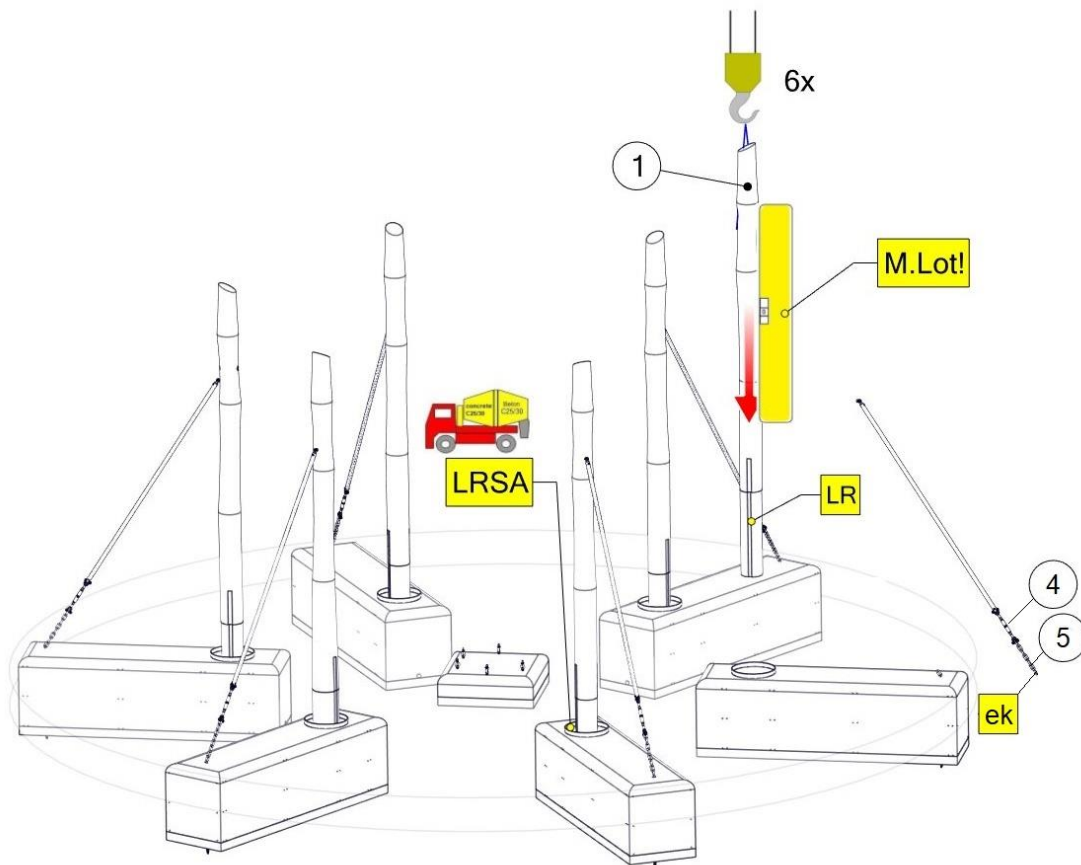
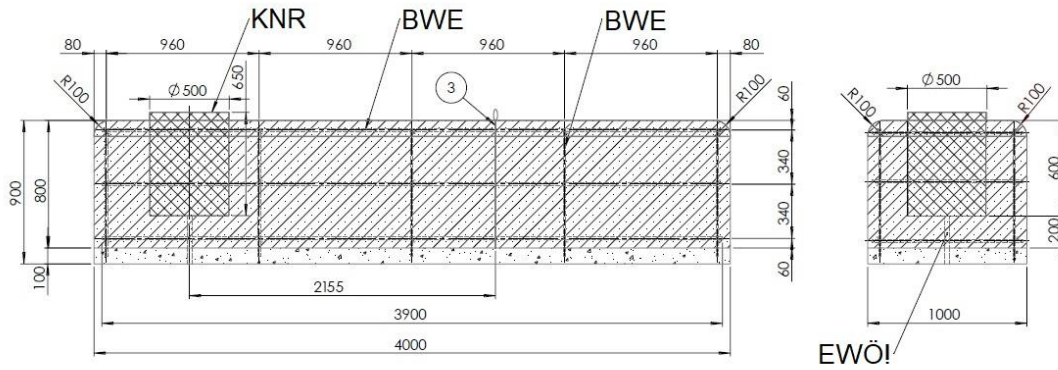
**Screw locking device**



**glue all screws, nuts and sleeves with loctite  
(not less than 5 drops !)**

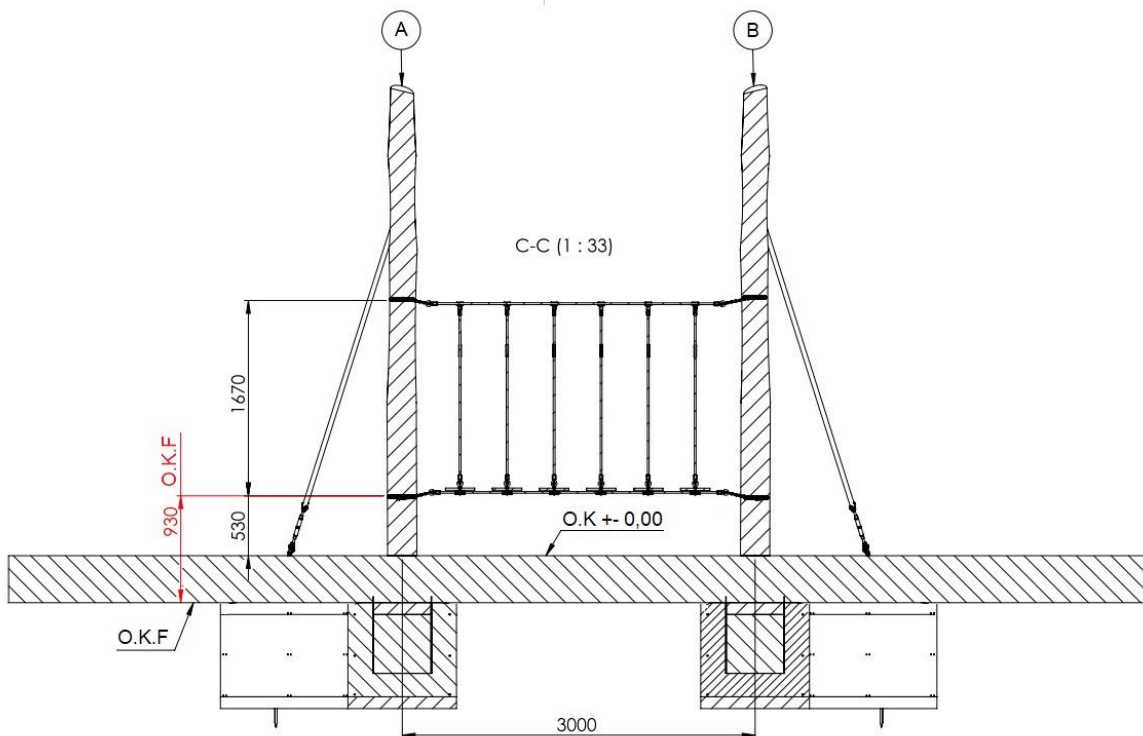
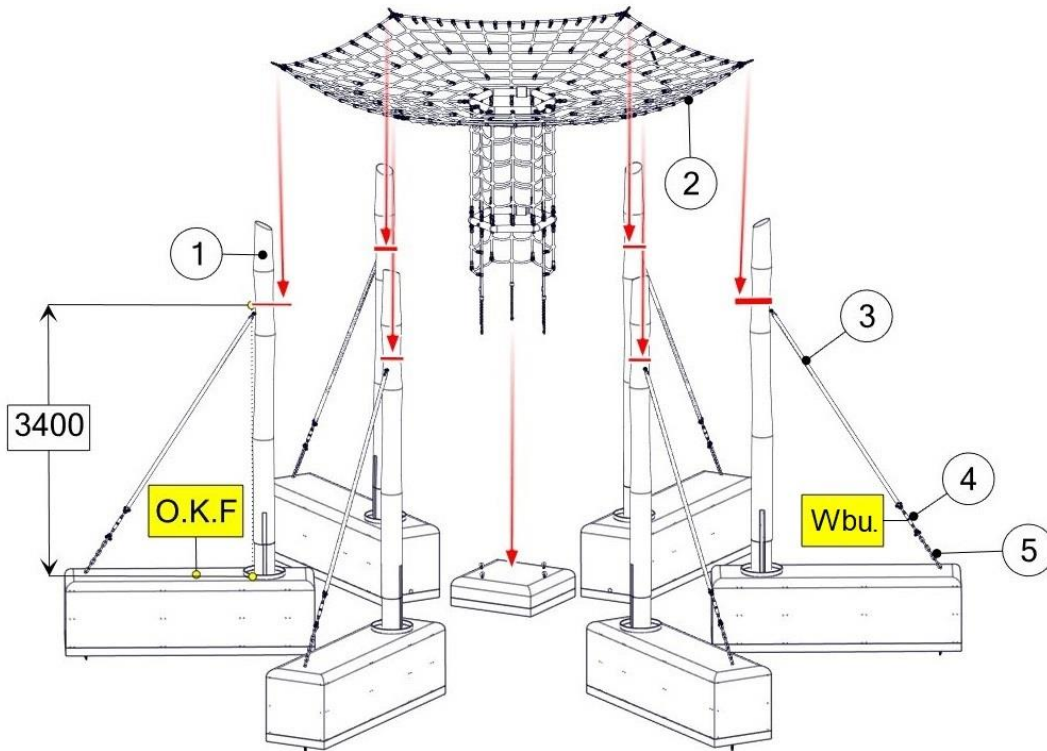
**(except for lock nut)**

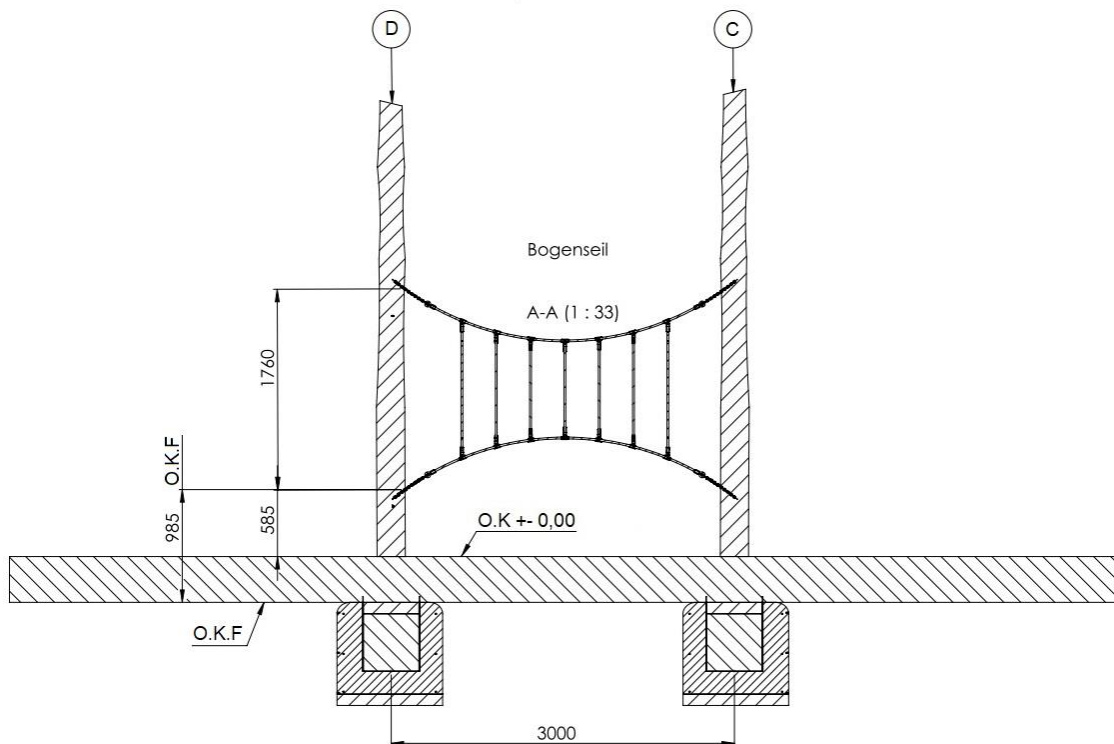
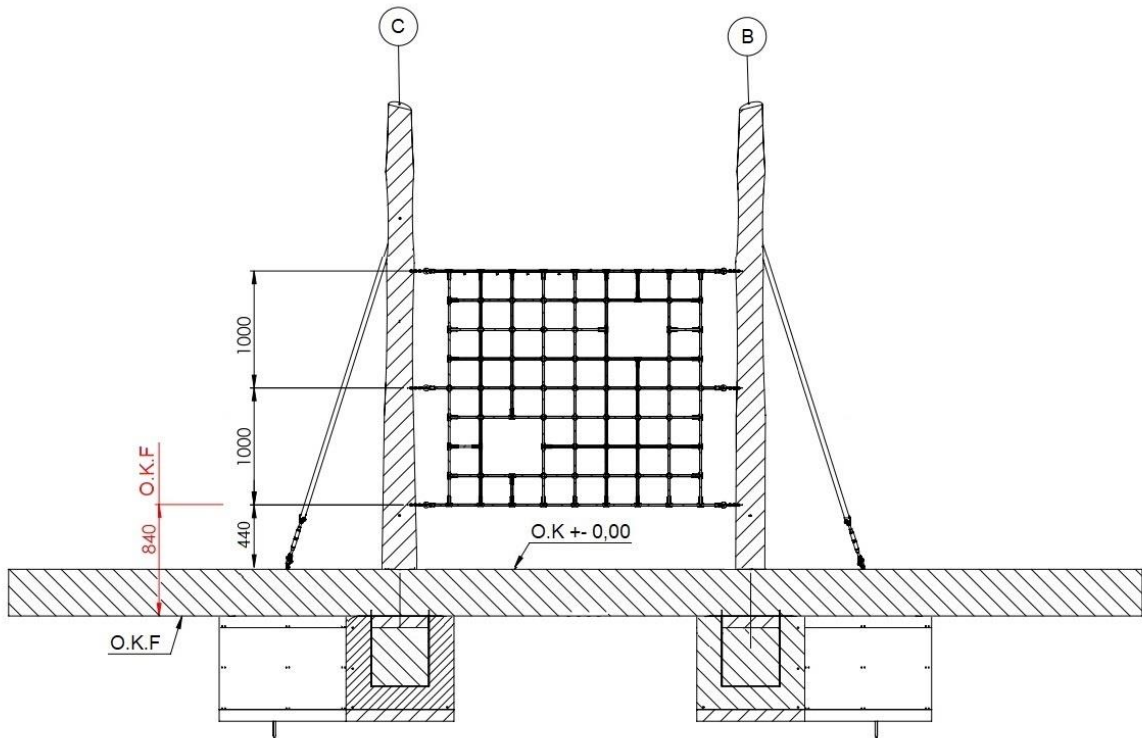


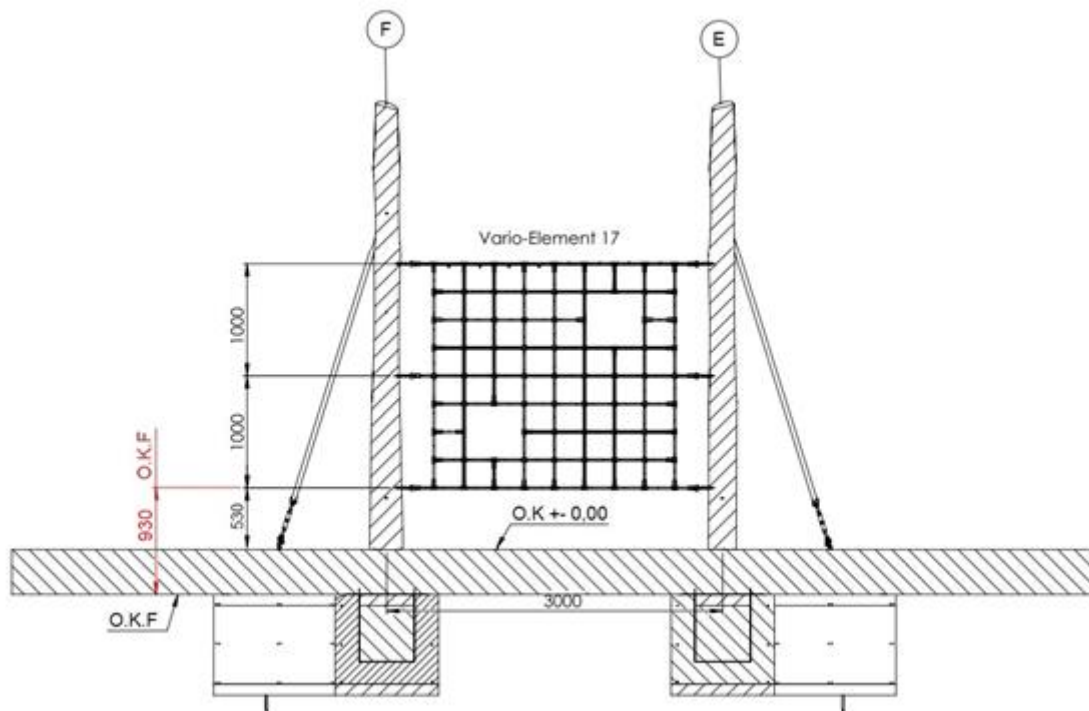
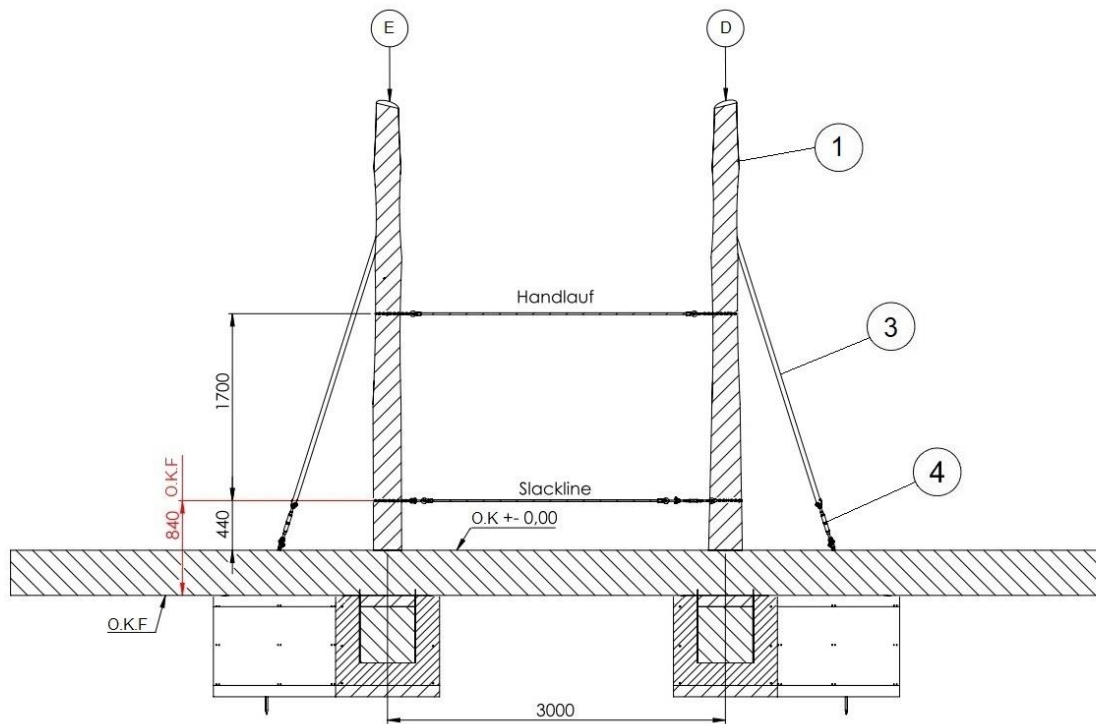




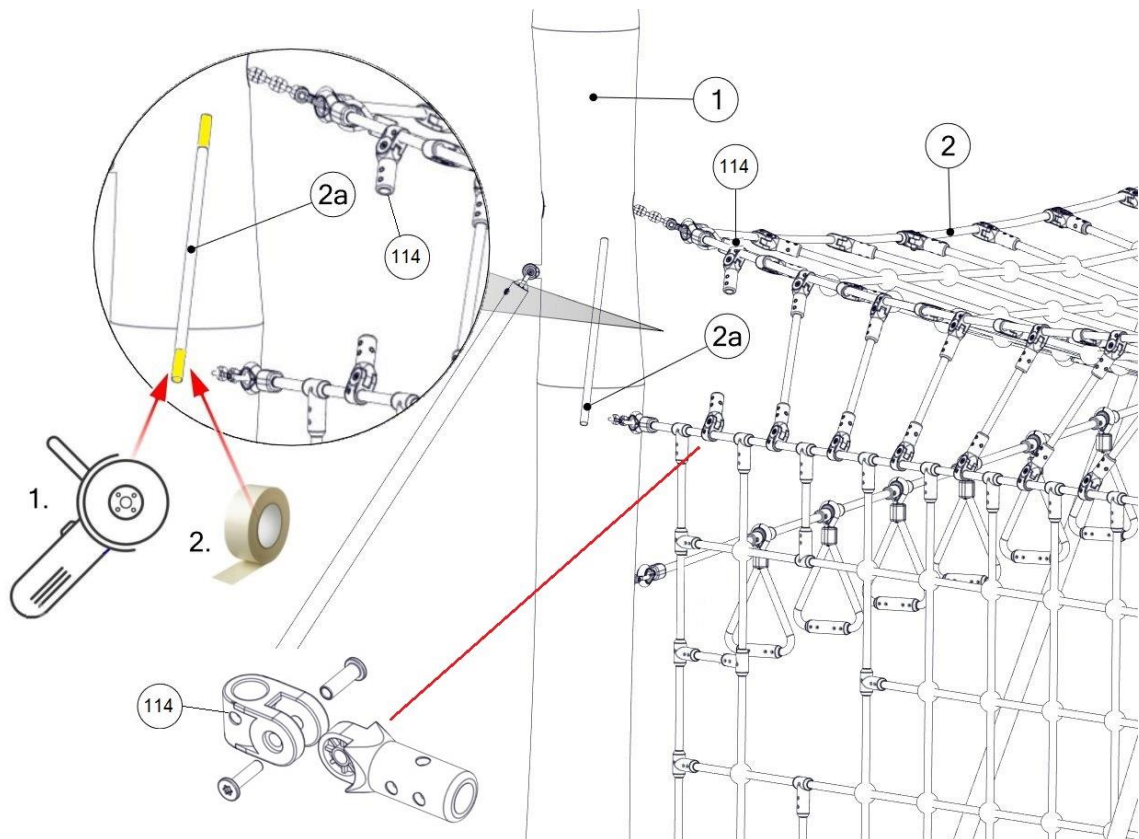
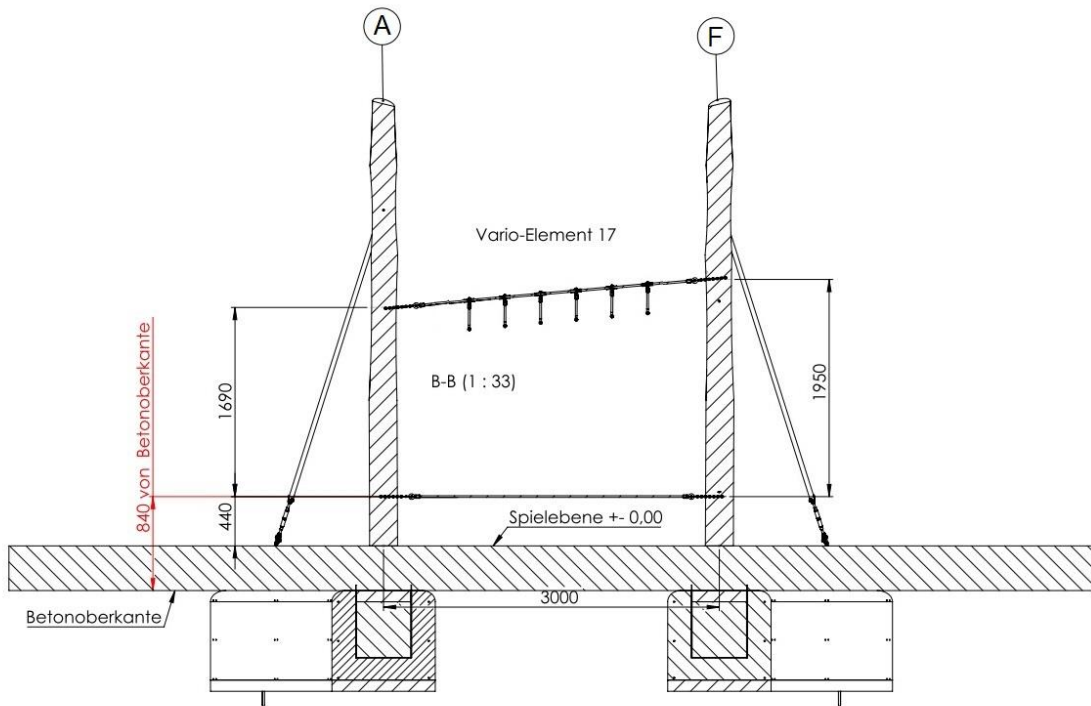


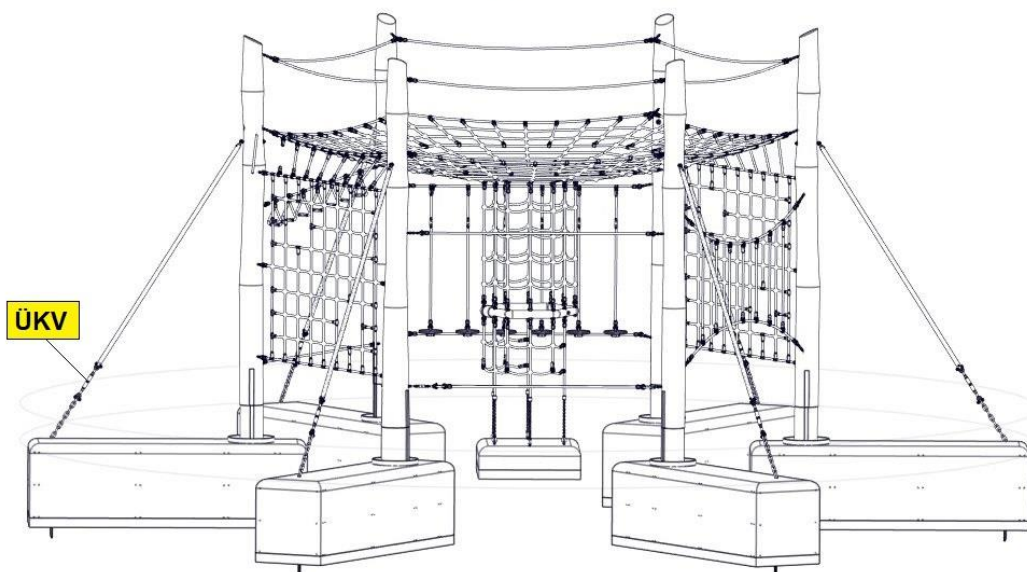
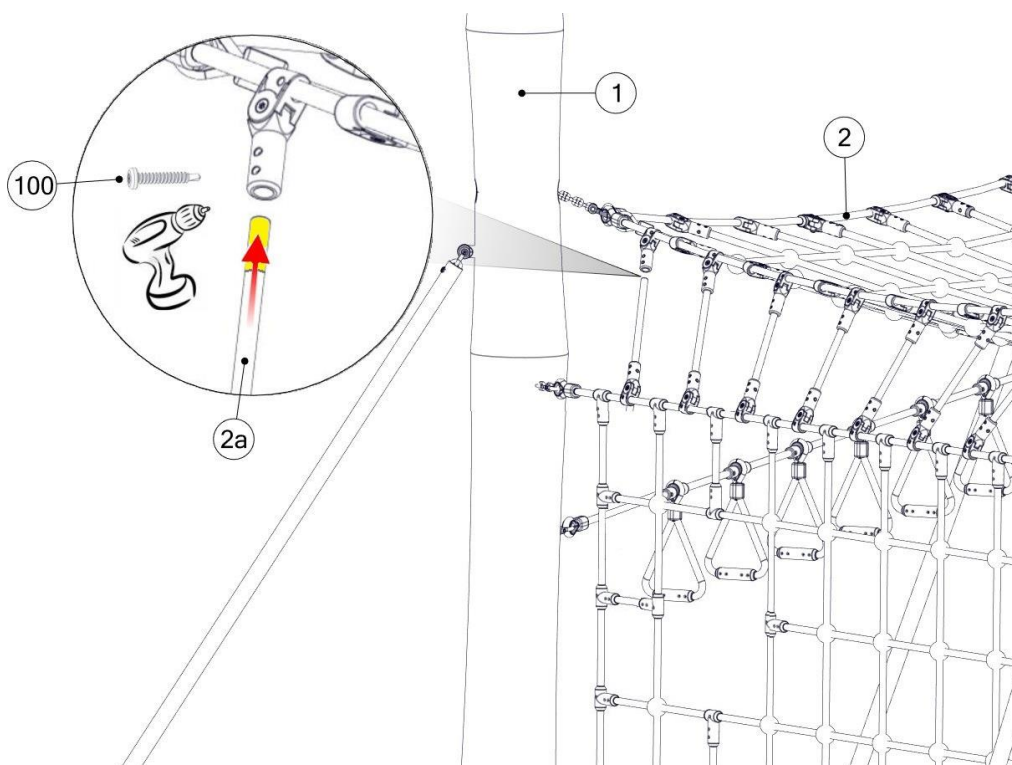




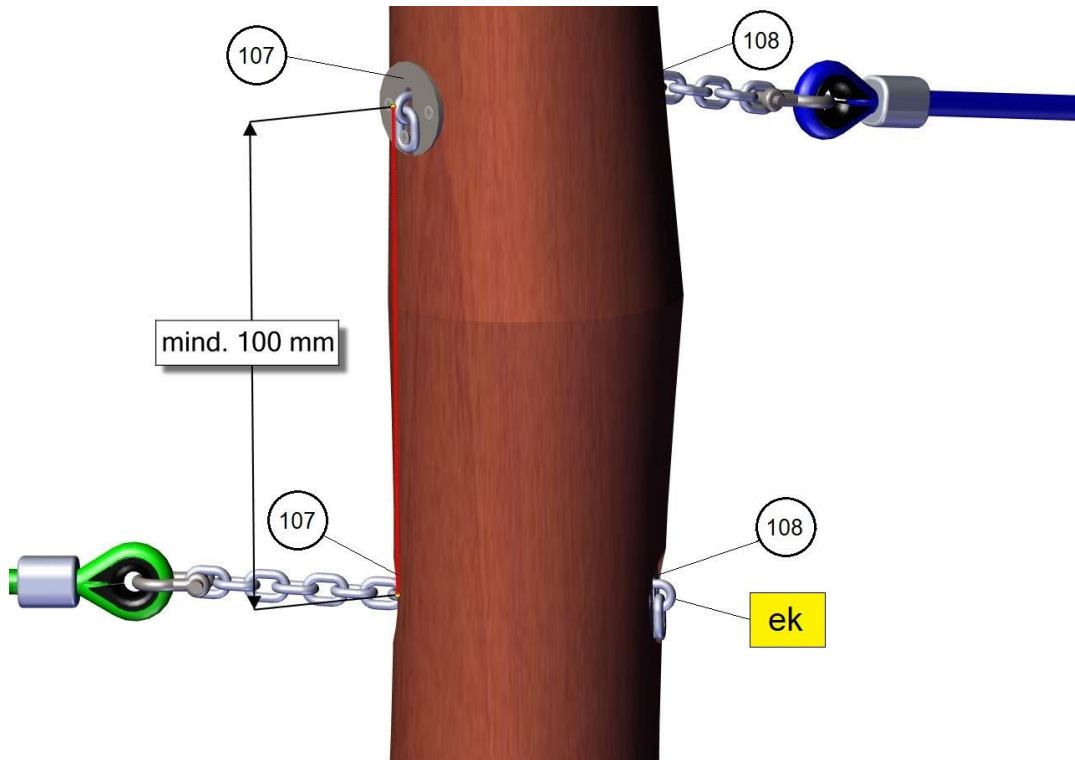




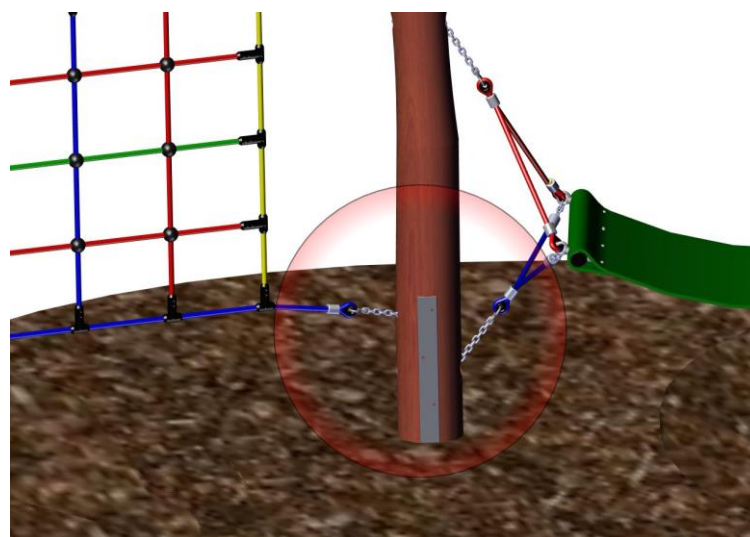




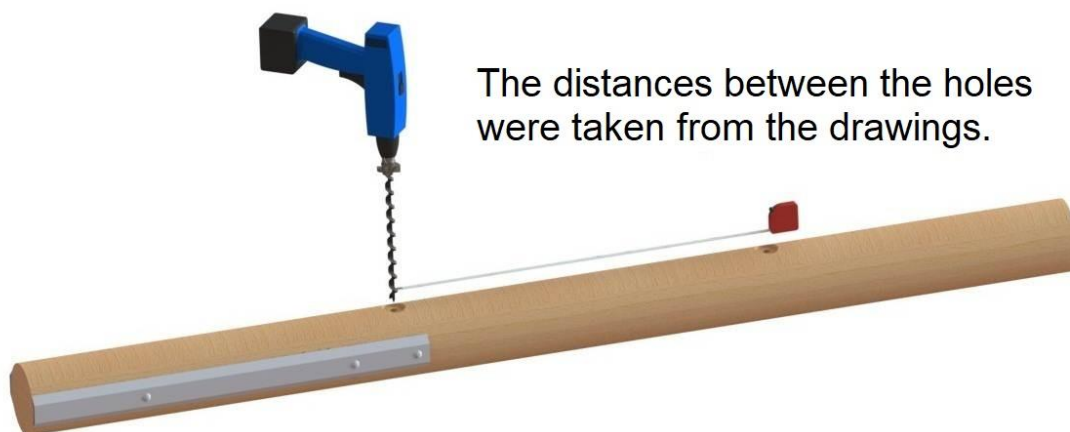
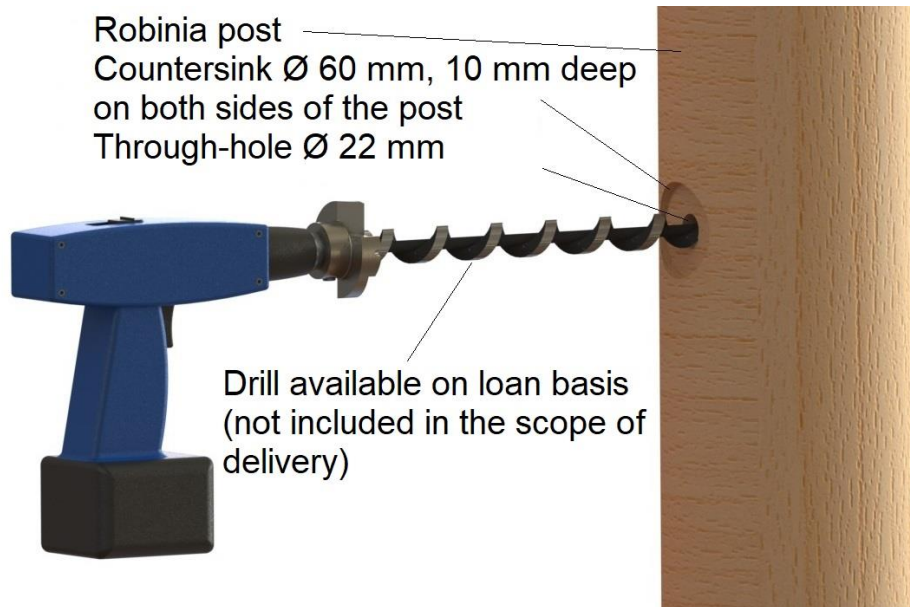
**Attention! Important note for the assembly of several elements.  
The distance between the drill holes of individual elements must be  
be at least 100 mm! It is possible that the  
drop height and the safety area may change.**

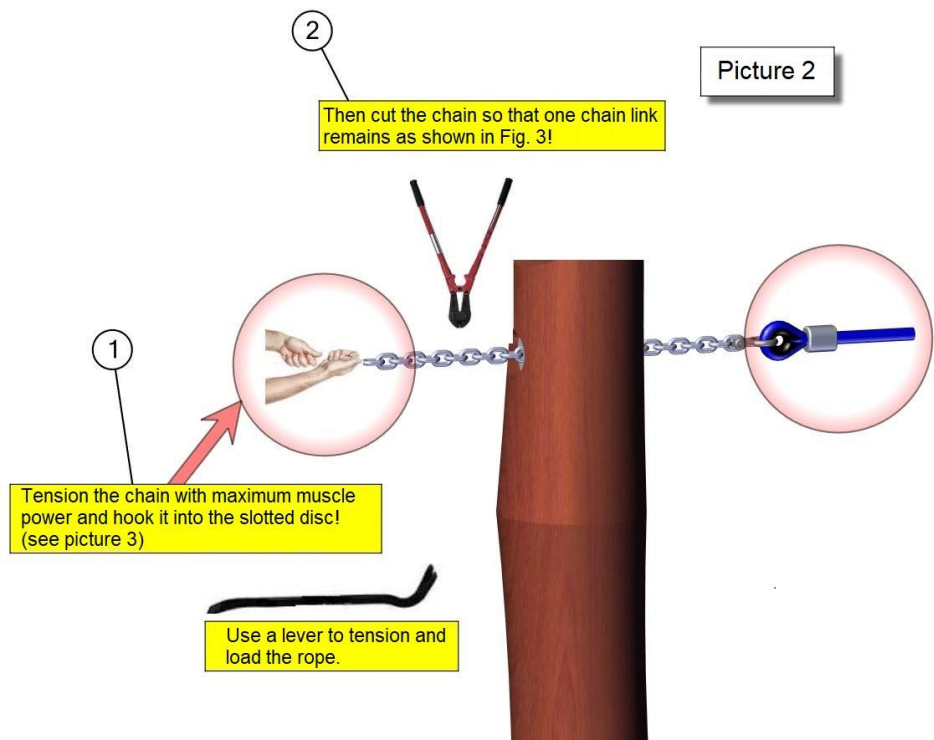
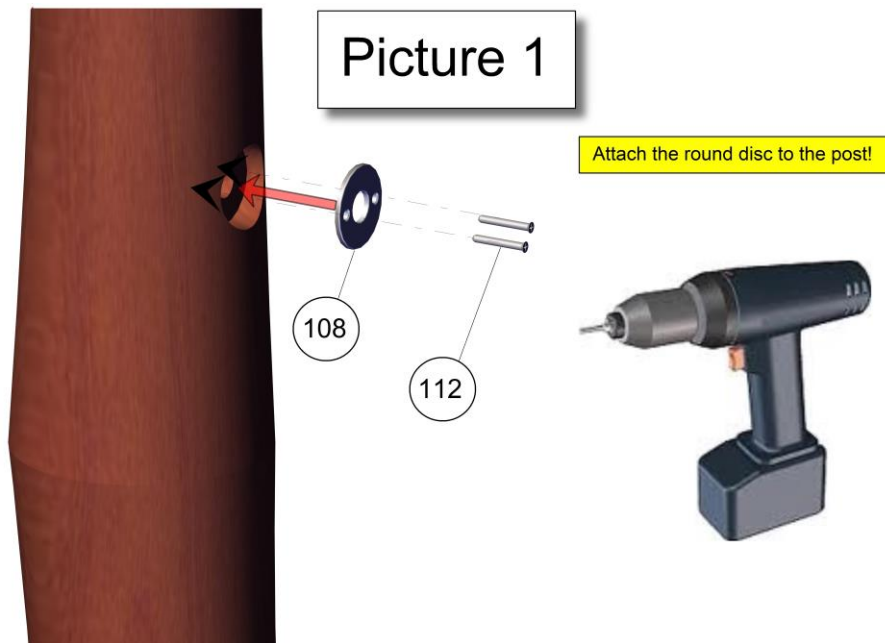


**During assembly, the angle must be maintained so that the drill holes do not  
do not cut the steel brackets.**



## Fastening for robinia posts

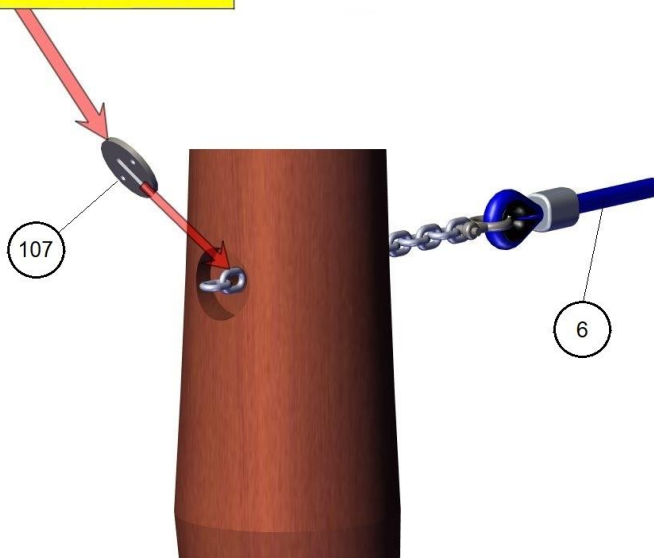






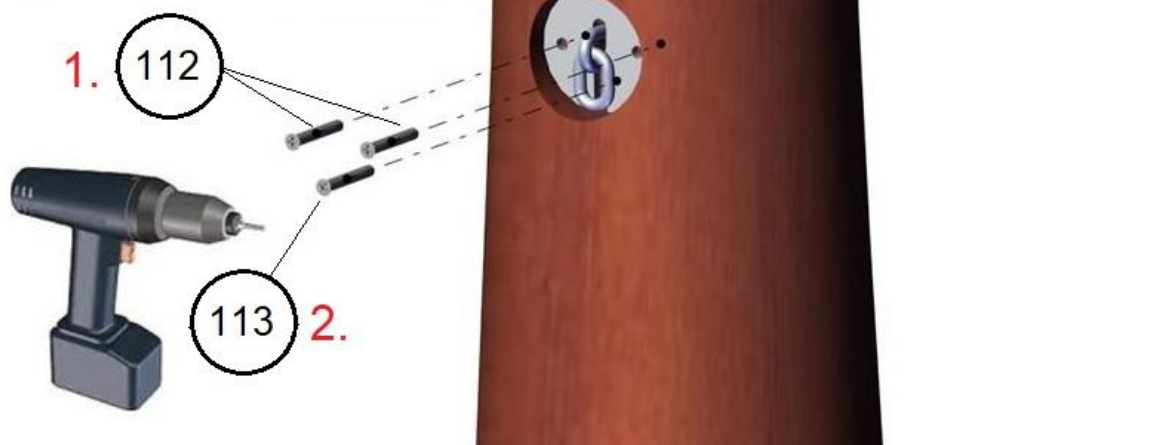
Picture 3

Before cutting the chain, hook the slotted disc into the vertically protruding chain link!



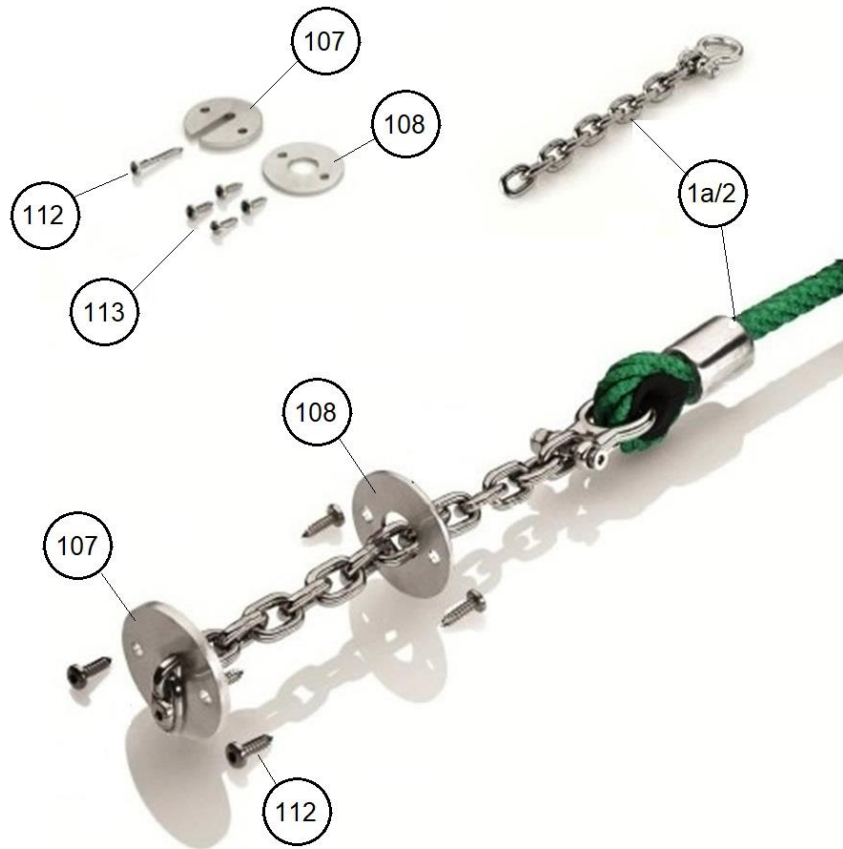
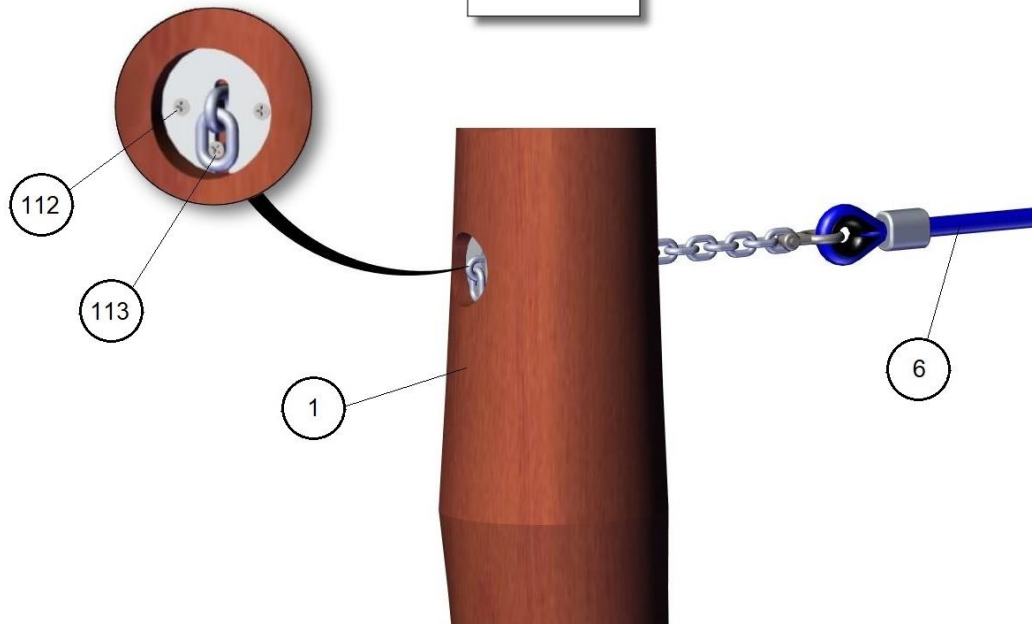
Picture 4

First attach the slotted disc and then attach the free-standing chain link!



Completion of the attachment to the robinia post!

Picture 5



---

## 5 Post installation checks

---



If the equipment has not been installed safely, you must ensure that the public is prevented from using it.

---

### 5.1 Marking filler depth

Labelling the posts to show the depth of material provided as fall protection (i.e. loose filler).

### 5.2 The equipment has not been installed safely in the following cases:

Safe equipment installation is not complete.

The protective surface has not been installed yet.

Appropriate maintenance work cannot guarantee operational safety.

### 5.3 Removal of all assembly aids

Please make sure that all assembly aids have been removed from the playing area. The equipment must not be approved for use until this check has been made.

### 5.4 Information about inspection of the equipment before it is used for the first time

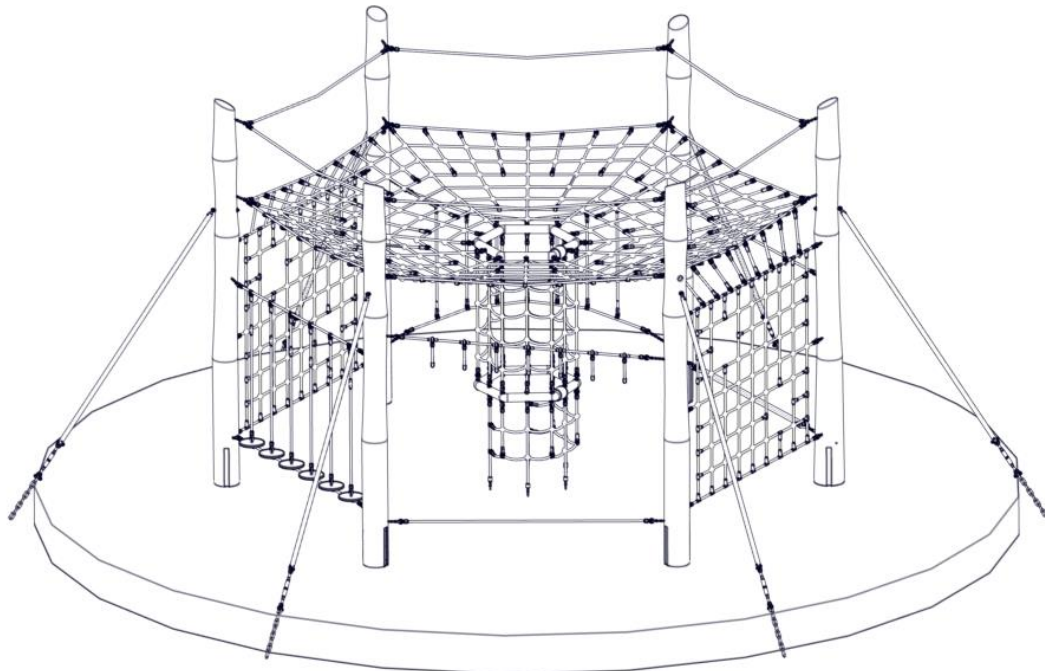
There are no special inspection requirements to be met before the equipment is used for the first time.

### 5.5 Retighten bolts

After one week of play, please retighten all bolts again. Later upon respective maintenance.



## **B Maintenance instructions Hexagonal tower item no. 4631-50 for setting in concrete**



**Revision history**

Revision 0 – 2023-05-31

The first allowed version

Maintenance instruction

Revision 0 – 2023-05-31

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---

## 6 Introduction Maintenance

### 6.1 General informations

This equipment should be installed, inspected, maintained and operated in accordance with EN 1176-7 guidelines.



**Please note:** Providing any necessary repairs are carried out, a piece of play equipment that is inspected regularly cannot become so damaged that it is dangerous.

---

Any spare parts which may be required can be obtained directly from your supplier.



This equipment should only be assembled, maintained and repaired by **persons with the necessary expertise**.  
**A copy of the inspection record should be given to the operator, who must confirm receipt.**

---

**This maintenance instruction is based on the standard  
“EN 1176-1:2017”.**

## **7 General maintenance information**

### **7.1 Maintenance intervals**

Maintenance intervals are based on average use. Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use.

### **7.2 Inspection frequency**

The frequency of inspections must be based on actual use. Factors that affect frequency include vandalism, location (e.g. coastal proximity), air pollution and the age of the equipment.

### **7.3 Maintenance products and procedures**

All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray or another similar lubricant.

### **7.4 Spare parts**

All spare parts must conform to the manufacturer's specifications.

### **7.5 Identifying spare parts**

All spare parts are listed in the parts list. The parts list follows the installation requirements.

### **7.6 Special instructions for the disposal of individual equipment components**

No special instructions are necessary for the disposal of individual equipment components.

### **7.7 Special measures during the break-in period**

No later than 2 weeks after assembly, all screwed connections should be checked and tightened if necessary.

### **7.8 Drainage holes**

All drainage holes should be kept clear.

### **7.9 Maintenance of protective surfaces**

Surfaces providing fall protection must also be maintained regularly. It is particularly important to maintain the correct level of loose surface material and add more if necessary.

---

## 7.10 Faults

---



Faults must be repaired as soon as they are detected. If serious defects that compromise safety cannot be repaired straight away, the public must be prevented from using the equipment with immediate effect.

---

## 7.11 Loose screws

---



Loose screws always cause quality problems and put safety at risk. Therefore, loose screws should always be tightened and checks carried out to ensure that there are no missing screws (e.g. look out for holes you can see through).

---

## 7.12 Preventing equipment use

Use of the equipment should be prevented in the event of incomplete installation, disassembly, maintenance, repairs and faults.

## 7.13 Safeguarding the guarantee

Steel posts and footings are guaranteed if regular maintenance is carried out and recorded in writing. Maintenance first takes place after 3 years. The steel posts must be excavated as far as the concrete foundations and checked for corrosion. Zinc paint should be applied to any corroded areas and scratches.

**It is recommended to carry out the inspection and maintenance work out in the specified time-frames, since wear and tear can occur through play, weathering influences or intentional damage, which compromises safety and function levels.**

**Defects, which compromise safety, must be treated promptly, either by immediately repairing or dismantling or closing down the equipment!**

**Defects, which compromise function, reduce the play value of the equipment and encourage vandalism, which may compromise safety levels. Damage should also be immediately repaired in this case.**

**Maintenance and servicing is to be carried only out by professionals.**

**General: Play equipment which is regularly checked may not be damaged in such a way that it becomes dangerous. However it is essential that where necessary repairs are followed up after regular checks.**

## **8 Maintenance timetable**

### **8.1 Special advices**

#### **8.1.1 Maintenance interval**

We strongly advise you to carry out inspections and maintenance work within the specified periods as use of the equipment, the weather and malicious vandalism cause wear and tear that compromises the safety and function of the equipment.

#### **8.1.2 Maintenance intervals in the event of intensive use**

Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use.

#### **8.1.3 Faults that compromise safety**



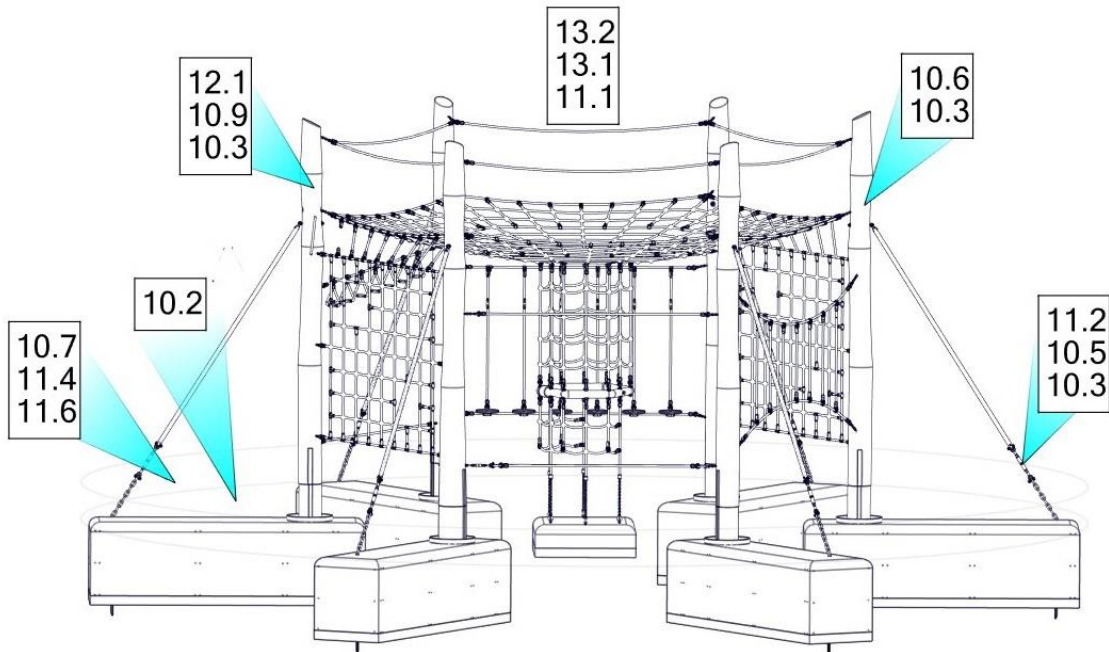
In the event of a fault that compromises safety, quick action must be taken. This may involve repairing it immediately or shutting down and dismantling the equipment.

#### **8.1.4 Faults that compromise function**



Faults that compromise function should also be repaired immediately. Such faults lower the value of the equipment to the user and encourage malicious vandalism, which may render the equipment less safe. Any damage should also be repaired immediately.

## 9 Regular maintenance



## 10 Monthly maintenance

- 10.1 Check the spaces between the equipment and the ground (clearance and height of fall).
- 10.2 Check the ground surface in the area with fall protection for hard objects and loose foundations.
- 10.3 Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.
- 10.4 Check that moving metal parts (joints, springs, etc.) move smoothly and are not worn. Replace if necessary. It is not necessary to lubricate joints as we only use maintenance-free metal roller bearings.
- 10.5 Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.
- 10.6 Check rubber parts, sleeves, etc. for wear and tear or damage and replace if necessary.
- 10.7 If necessary, remove excess padding material from the post footings due to danger of rotting.
- 10.8 Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary.
- 10.9 Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.

## 11 Quarterly maintenance

- 11.1 Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.
- 11.2 Tighten all forms of attachment.
- 11.3 Repaint and retreat surfaces.
- 11.4 Maintenance of fall protection surfaces.
- 11.5 Lubrication of joints.
- 11.6 Check the height of the fall and top up with loose filler if necessary. If the posts are labelled, top up as far as the mark.
- 11.7 Retighten all bolts

## 12 Half yearly maintenance

- 12.1 Stability (check posts, bracing, foundations, etc.). Ascertaining whether there are any changes in equipment safety as a result of repairs that have been carried out or components that have been added or replaced.





## Annual Maintenance

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### 13 Annual maintenance

- 13.1 Ascertaining that the equipment, foundations and surfaces are safe for operation.
- 13.2 In particular, the equipment should be checked for decay and corrosion. It may be necessary to dig out or excavate certain components in order to do so. Zinc paint should be applied to corroded areas and scratches.



The equipment must be inspected by someone **with the necessary expertise** in strict compliance with the instructions issued by Huck Seiltechnik GmbH.

**A copy of the inspection record should be given to the operator, who must confirm receipt.**

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## 15 Hand over document

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After the installation of the equipment pass the installation and maintenance documents to the operator. The operator has to receive the hand over documents. The complete filled and signed hand over document should be sent to the supplier.

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Art.-No.: 4631-50

Type of item: Hexagonal tower

Serial number:

**Customer or operator (Town, Town council, Kindergarten, etc.):**

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Competent person in charge:

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**Installation company (address):**

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Responsible assistant (assembler):

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Received the complete assembly instructions, maintenance instructions and maintenance printout.

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(Signature of operator)      (Signature of installation company)  
(Stamp)

Date: \_\_\_\_\_

**Please copy and return once a year after main inspection has been carried out to the manufacturer by Telefax (06443) 83 11 79!**

**Place the confirmation form in the play equipment files.**